U.S. Department of Health & Human Services National Institutes of Health





Helene Langevin, M.D., has served as director of NCCIH since 2018. Prior to joining NCCIH, Dr. Langevin was the director of the Osher Center for Integrative Medicine at Harvard Medical School and a principal investigator of several NIH-funded grants.

The National Center for Complementary and Integrative Health (NCCIH) is the Federal government's lead agency for scientific research on complementary and integrative health approaches and their role in improving health and health care.

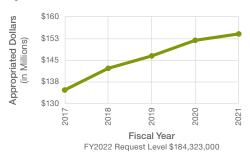
Includes complementary therapies, practices, and systems that use nutritional, physical, and/or psychological approaches and may have originated outside of conventional medicine Advances research on the integration of complementary and conventional care and integrative approaches to physiology, pathophysiology, and treatment



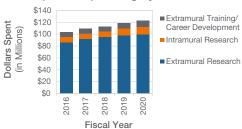


Addresses health promotion and restoration, resilience, disease prevention, and symptom management

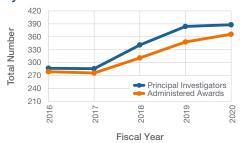
Congressional Appropriations by Fiscal Year



Research, Training and Career Development Spending by Fiscal Year



Principal Investigators Supported by Fiscal Year



Research Highlights

The following are some of the Intramural and Extramural grants NCCIH is supporting:

- Yoga and cognitive behavioral therapy (CBT) for symptom management of anxiety.
- Feasibility of group-based yoga for management of chronic pelvic pain in women
- Mindfulness based cognitive therapy (MBCT) resiliency program for critical care nurses
- Mindfulness-Orientated Recovery Enhancement (MORE) for symptom management of opioid cravings and pain.
- A pragmatic randomized trial of chiropractic care for Veterans with chronic low back pain
- Improving Veteran access to integrated management of chronic back pain
- Probiotic intervention for Veterans with post-traumatic stress disorder

- Phased clinical trial of dietary supplement kava for anxiety.
- Observational study of the effects of edible cannabis and its constituent cannabinoids on pain, inflammation, and cognition
- Mechanism and optimization of CBD-mediated analgesic effects
- Analgesic and opioid sparing effects of terpenes administered alone and in combination with THC
- Sociocultural and biobehavioral influences on pain expression and assessment
- Probiotics and the microbiotagut-brain axis
- Mechanistic impact of acupuncture stimulation on inflammation.
- The impact of chronic pain on the brain, and the opioid receptor system
- Mechanisms of chronic pain in sickle cell disease patients after hematopoietic stem cell transplant
- Brain mechanisms supporting mindfulness meditation-based chronic pain relief

Facts and figures

- 33 percent of U.S. adults use complementary or integrative health approaches
- FTE: 71

Recent Accomplishments

- NCCIH-supported investigators found that yoga can reduce anxiety in adults with generalized anxiety disorder
- Research shed light into the mechanism of acupuncture stimulation and found that it can reduce systemic inflammation through its effects on the autonomic nervous system
- Initial results from a stage 1 pilot study found that the MORE intervention can reduce opioid cravings and chronic pain among individuals with opioid use disorder.
- The Centers for Medicare and Medicaid Services (CMS) began covering acupuncture for the management of chronic low back pain in older adults. This decision was based partly on research supported by NCCIH.

Current Activities

NCCIH invests in research throughout a pipeline from basic and mechanistic to clinical efficacy/effectiveness to implementation research. NCCIH also provides training and career development opportunities to support this pipeline. The following are a few current NCCIH activities:

- Supporting research investigating the potential pain-relieving properties and mechanisms of actions of the diverse phytochemicals in cannabis, including both (non-THC) minor cannabinoids and terpenes.
- Promoting collaborative, transdisciplinary research on the safety, effectiveness, and mechanisms of action of botanical dietary supplements that have a high potential to benefit human health through the Consortium for Advancing Research on Botanical and Other Natural Products (CARBON) Program.

— NCCIH's Division of Intramural Research and their NIH partners received a NIH Director's Challenge Innovation Award to support a pain research center within the NIH Clinical Center. The NIH Pain Research Center will be a nexus for NIH intramural researchers to collaborate in deciphering mechanisms underlying pain and related conditions and to develop new treatment strategies.

NCCIH Framework for Clinical Research



- Leading the NIH's Helping to End Addiction Long Term (HEAL) initiative programs: Behavioral Research to Improve Medication Based Treatment (BRIM) and Pragmatic and Implementation Studies for the Management of Pain to Reduce Opioid Prescribing (PRISM)
- Coordinating the NIH-DoD-VA Pain Management Collaboratory, a partnership between the NIH, Departments of Defense (DoD) and Veterans Affairs (VA), that fosters pragmatic clinical research on complementary and integrative approaches for managing pain and other symptoms in military personnel and veterans.
- Providing hands-on grant writing and scientific review tutorials at scientific conferences for the career development of early stage investigators.

Future Initiatives

NCCIH is interested in understanding health, disease and interventions as a process that involves the whole person. In the current health care system, we tend to think about disease one organ system at a time. However, the systems of the body do not work in isolation. Whole person research seeks to study multiple aspects of a person, health, disease or intervention by exploring the fundamental science of interconnected systems, investigating multicomponent interventions or therapeutic systems, and examining the impact of these interventions on multi-system or multi-organ outcomes.

NCCIH plans to develop and expand efforts to promote implementation science. For many years, it has been assumed that tools and interventions deemed efficacious within clinical or community-based trials would be readily adopted and implemented; however, compelling evidence suggests that this has not been the case. Implementation science seeks to understand



why efficacious tools and interventions are not being adopted and how those barriers can be overcome. Closing the gap between biomedical and basic behavioral discovery and population health and healthcare delivery, is both a complex challenge and an absolute necessity if we are to ensure that all populations benefit from the Nation's investments in scientific discoveries.